

23/1  
PKU

10/525378

BT01 Rec'd PCT/JP 23 FEB 2005

DESCRIPTION

SMALL MULTI-MODE ANTENNA AND RF MODULE USING THE SAME

This application is a 371 of PCT/JP02/10608 filed on 10/15/2002.

5 Technical field

The present invention relates to an antenna of wireless apparatus that provides the user with multi-media services and a RF (Radio Frequency) module including the antenna. In particular, for use in multimedia wireless apparatus that  
10 implements a plurality of services by information transmission through the media of electromagnetic waves with different frequencies, the invention relates to a multi-mode antenna applied to the wireless apparatus and a multi-mode compatible RF module including the antenna.

15

Background Art

Multimedia services providing services in terms of transferring and providing various kinds of information by way of radio transmission are getting more active lately and a great  
20 number of wireless apparatuses have been developed and put into practical use. These services are diversified year after year, involving telephones, TVs, Local Area Networks (LANs), etc. End users are required to have different wireless apparatuses for different services to receive all services.

25 With the aim of improving the usability of end users who